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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,543	08/02/2001	Kazunori Fushimi	GOT-143NP	4662

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EXAMINER	
LIU, JOSHUA C	

ART UNIT	PAPER NUMBER
2121	8

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/890,543	FUSHIMI, KAZUNORI	
	Examiner	Art Unit	
	Joshua C Liu	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *8/3/2001 (eff. filing date 12/28/99)* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1 and 3 have been examined.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- The abstract uses the term "means" on L. 4, 7, 9, and 11.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Masatake (Japanese Patent Publication # 7-54806; Published 02/28/1995).

Claim 1

Claim 1's

> A signal processor for a joystick comprising:

A joystick input device which varies joystick voltage input value Vi according to an operating amount of a joystick from a neutral position;

An input means which outputs the average value of the joystick voltage input value Vi read at every sampling time over a predetermined number of past occasions as a joystick voltage computation value Vic; and

Computation means which computes an output computation value Voc set according to the joystick voltage computation value Vic

is anticipated by Masatake, wherein Masatake teaches:

- An actuator control device (Masatake Fig. 1) comprising:
  - A lever (Masatake Fig. 1 Element 8), which is a joystick input device, generates electrical signal according to an operating amount from a neutral position (Masatake §0019, "[m]oreover, 7 is a potentiometer... via a controller.");
  - A signal processor (Masatake Fig. 1 Element 13) transforms the lever position signal (Masatake §0022, "[t]he controller... in drawing 2.") into lever output signal by applying a first-order lag (Masatake §0006-7, "[a]n operation-cycle... gain selection means."). Calculating the average value of the input value read at every sampling time over a predetermined number of past occasions, or the moving average, is a first-order lag algorithm;
  - And an operation output section (Masatake Fig. 1 Element 21) which computes an output computation value set according to the lever output signal (Masatake §0033, "[t]his gain K... following several 1.").

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masatake (Japanese Patent Publication # 7-54806; Published 02/28/1995) in view of Satoru (Japanese Patent Publication # 4-143334; Published 05/18/1992).

Claim 3

Claim 3 recites

A signal processor for a joystick comprising:
A joystick input device which varies joystick voltage input value Vi according to an operating amount of a joystick from a neutral position;
An input means which outputs the average value of the joystick voltage input value Vi read at every sampling time over a predetermined number of past occasions as a joystick voltage computation value Vic;
Computation means which computes an output computation value Voc set according to the joystick voltage computation value Vic; and
Operation start detecting means which detects an operation start when the joystick is pushed over from the neutral position, wherein the computation means increases the output computation Voc to an effective maximum value when operation starts.

- Regarding claim 3, Masatake discloses an actuator control device (Masatake Fig. 1) comprising:
  - A lever (Masatake Fig. 1 Element 8), which is a joystick input device, generates electrical signal according to an operating amount from a neutral position (Masatake §0019, "[m]oreover, 7 is a potentiometer... via a controller.");
  - A signal processor (Masatake Fig. 1 Element 13) transforms the lever position signal (Masatake §0022, "[t]he controller... in drawing 2.") into lever output signal by applying a first-order lag (Masatake §0006-7, "[a]n operation-cycle... gain selection means."). Calculating the average value

of the input value read at every sampling time over a predetermined number of past occasions, or the moving average, is a first-order lag algorithm;

- And an operation output section (Masatake Fig. 1 Element 21) which computes an output computation value set according to the lever output signal (Masatake §0033, "[t]his gain K... following several 1.").

However, Masatake does not teach an operation start means which detects an operation start when the actuator control device is pushed over from the neutral position, wherein the computation means increases the output computation value to an effective maximum value when operation starts. Satoru teaches a start-detecting means which detects when the joystick is moved from the neutral position (Satoru Pg. 3 Bottom Right Quadrant L. 1-4, "[a]s indicated in Fig. 3... relationship."), wherein the output signal is temporarily increased to the limit when the operation starts (Satoru Pg. 3 Top Left Quadrant L. 6-9, "[t]he spool of the pilot switch valve quickly moves momentarily for time t, and subsequently, strokes until it is balanced on the hydraulic pressure matching with the designated output.") –so that the responsiveness of the pilot switch valve increases (Satoru Pg. 4 Top Right Quadrant L. 19-20, "[t]he responsiveness to the pilot switch valve accelerates.") --. Therefore, it would have been obvious to one of ordinary skill in the art, in view of Masatake, to modify Masatake by adding an operation start means which detects an operation start when the actuator control device is pushed over from the neutral position,

wherein the computation means increases the output computation value to an effective maximum value when operation starts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua C Liu whose telephone number is (703) 305-6435. The examiner can normally be reached on Monday-Friday, 8:30am-5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anil Khatri can be reached on (703) 305-0282. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

jl

Wilbert L. Starks, Jr.
Primary Examiner
Art Unit - 2121

English translation of Japanese Patent Publication # 4-143334, Pg. 3 Upper Left Quadrant L. 1-9, as referenced by the Examiner:

b) The electrical signal raised and output in step a) is made to work on the electromagnetic proportional pressure-reducing valve by a controller for the prescribe time period, so the hydraulic output from the electromagnetic proportional pressure-reducing valve works on the pilot pressure receiving in proportion to the output from said controller. The spool of the pilot switch valve quick moves momentarily t, and subsequently, strokes until it is balanced to the hydraulic pressure matching with the designated output.

English translation of Japanese Patent Publication # 4-143334, Pg. 4 Upper Right Quadrant L. 19-20, as referenced by the Examiner:

The responsiveness to the pilot pressure receiving unit accelerates.